through glass plate 2 to evaporate metal film 1a, thereby making a film M deposit to a specific area of glass plate 2, as shown in Fig. 4(b); successively separating glass plate 2 from glass plate 1b at a Z stage not shown and then scanning the laser beam LA while controlling irradiation thereof by means of a Q switch in order to apply the laser beam LA to the predetermined part of the film M, thereby forming a predetermined figure as shown in Fig. 4(c). In the present embodiment, a Two-dimensional Data Code of 7 cells × 7 cells is prepared.

C1 concld

At page 24, lines 7-11, please delete the paragraph and substitute therefor:

C2

The present embodiment uses chromium for the metal film, soda glass for glass plate 1b, and fused silica for glass plate 2. The two-dimensional Data Code mark formed on glass plate 2 has a clear contrast and is easily recognizable after marking by using a data code reader.

At page 24, line 12 through page 25, line 18, please delete the paragraph and substitute therefor:

C3

Subsequently, in the process of Fig. 4 (b), the quantity of light of a Krypton arc lamp, which is a laser excitation source, is intentionally varied during marking to form the fluctuated state of the laser power shown in Fig. 3, thus forming a Two-dimensional Data Code. The maximum power fluctuation rate at this time is decided as 50 % of the peak power. The Two-dimensional Data Code thus formed is easily recognizable by means of the data code reader in the same way as the Two-dimensional Data Code formed in the state with no power fluctuation resulting in the clear mark. When the metal film on the glass plate is used as the marking material in this way, since the heat capacity of the metal film is small

compared to that of bulk materials, all the metal film is evaporated by the small laser power and then deposited on the glass plate. Therefore, the metal film is not affected by variation of the laser power, thereby being able to provide a code mark of high reading reliability. Further in the present embodiment, although a chromium films of a thicknesses of 0.1 μm, 0.2 μm, 0.3 μm, 0.5 μm, 0.7 μm, 1 μm, 2 μm, 3 μm, 5 μm, or 10 μm is used as the metal film, all succeeded in forming a clear two-dimensional mark. However, in the case of film thickness of 3 μm or more, a part of the chromium film on glass plate 1b, which is not used for forming the code, sometimes strips off at the time of marking, and it is desirable that the film thickness thereof be 2 μm or less for practical use. Further, it is apparent that a Two-dimensional Data Code being heat-and chemicals-proof can be provide when stainless steel or steel is used as the metal film. Other metal film made of the marking material described in embodiment 1 may also be used.

C3 cont'd

At page 25, line 19 through page 26, line 14, please delete the paragraph and substitute therefor:

C4

In the present embodiment, although a marking material having a metal film deposited on the glass plate is used, inorganic material such a sapphire, quartz other than glass plate may be used as long as the laser beam transmits through the material. Although the YAG laser is also used in the present embodiment as the laser beam, if it matches the material to be marked, it is allowable to use a carbon gas laser. For example, in the marking operation can be performed with the structure and the process shown in Fig. 4, if a silicon wafer is used as material-to-be-marked, organic matter such as paint or ink or metal such as Cr or gold or inorganic matter such as iron oxide, SiO_2, silicon nitride is used as thin film, and a silicon wafer is used as substrate of thin film, paint or ink, Cr or gold, iron oxide or SiO_2 or silicon

nitrade can be marked on silicon wafer. In the present embodiment, review of recognition performance is performed with reference to the mark expressed with the Two-dimensional Data Code, however, QR Code, Veri Code, or a two-dimensional bar code, each of which in a minute code, or bar code can be used as the code.

C4 concl'd

At page 28, line 21 through page 29, line 12, please delete the paragraph and substitute therefor:

C5

In the present embodiment, a Two-dimensional Code as shown in Fig. 6 is made by using titanium as the material according to the same procedure as that of embodiment 1. Results of marking are shown as parameters of the first laser power and the second laser power. In Fig. 6, a code is composed of 20 cells arranged widthwise and 20 cells arranged lengthwise, in total 400 cells. An L pattern is composed of the left side and the bottom side, and the right side and the upper side pattern have white and black marks arranged therein alternately. Both configurations have a pattern with which a two-dimensional code reader discriminates the position of the code. 18 horizontal and 18 lengthwise directional cells amounting to 324 cells are surrounded by the above four sides and record data such as a diagram, a numeral, or an English character. In other words, the Two-dimensional Code of the present embodiment can record data of 324 bits.

At page 29, line 13 through page 30, line 9, please delete the paragraph and substitute therefor:

C6

A procedure for manufacturing the Two-dimensional Code comprises the steps of scanning the laser beam in the first process by a 50 μm interval as shown by the arrow mark in Fig. 7. Then, forming each square cell of a white ground by scanning and applying the

laser beam to form a pattern of a □ type as shown in Fig. 8 by the second laser power (10 W in the present embodiment) in the second process, thereby entering data in 400 cells in total. By scanning the laser beam while keeping the first laser power constant (in the present embodiment, 30 W), the irradiation energy power is raised to increase the amount of metal evaporated at the place where the laser beam turns, corresponding to the left and right sides shown in Fig. 7 (an enlarged part of Fig. 7), thereby increasing the amount of metal deposited to the glass plate, resulting in a Two-dimensional Code having a thick film at the turning point. Therefore, two problems are raised. First, in the second process, the film on the glass plate can not be removed sufficiently at the thick portion, consequently producing specks. Second, since the L pattern formed in the second process requires linking □ patterns together and drawing takes a long time

C6 cncl'd

At page 32, lines 5-16, please delete the paragraph and substitute therefor:

With a first laser power of 20W, since there is scarcely any film deposited to the glass plate, no readable Two-dimensional Code is made. Further, since the Two-dimensional Code made by a first laser power of 30W and a second laser power of 30W has a lot of specks, it is unreadable by the two-dimensional code reader. Further, with a first laser power of 70W and a second laser power of 15W or less, the film cannot be perfectly removed, so the mark cannot be read by the two-dimensional code reader. From the above results, it is obvious that a readable Two-dimensional Code can be made when the first laser power is higher than the second laser power.

C7

At page 47, line 5 through page 48, line 19, please delete the paragraph and substitute therefor:

C8

In the present embodiment, it was tried to form marking by applying the laser beam to an indium-tin compound oxide film (hereinafter referred to ITO film) coated on a glass plate with a predetermined laser power (in the present embodiment, 0.08W or less) and by scanning the laser beam so as to form a specific character. In a portion of the ITO film irradiated by the laser beam with the power of 0.02 to 0.08 W, scarcely any change can be detected with the naked eye. However, when the portion of the ITO film irradiated by the laser beam through a band pass filter for transmitting light with wavelength of 700 to 800 nm was checked, it was found that the reflection light is remarkably reduced, and the portions of the ITO film irradiated and not irradiated by the laser beam make a clear contrast which can be easily recognized. That is, the portion irradiated by the laser beam looks black because the light transmits therethrough, and the portion not irradiated by the laser beam looks white because of reflecting the light, thereby producing a mark with a clear contrast. In the present embodiment, characters are recognized due to reflection light, but they can also be recognized in the same way with transmission light. In recognition due to the transmission light, the portion irradiated by the laser beam looks white because the light transmits therethrough, and the portion not irradiated by the laser beam looks black because the light is reflected, thereby producing a mark with a clear contrast. Therefore, if the reflexivity or the transmissivity of the film on the glass plate is varied by irradiation of the laser beam, a recognizable mark can be obtained. In the present embodiment, the laser beam is applied to the ITO film on the glass plate for varying the reflexivity and the transmissivity, however, if a film made of metal, alloy, a metallic compound or a compound of these matters other than the ITO film is used and the reflexivity as well as the transmissivity of the film can be varied by irradiation of the